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(ii) coating the nucleic acid in (i) onto inert particles suitable for carrying a polynucleotide stably coated thereon;

(iii) accelerating the particles of (ii) into epidermal cells of the mammal in vivo, to generate an immune response sufficient for protection against a hantaviral challenge in said mammal.

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12. (Amended) The method according to claim 9 wherein said hantavirus is chosen from the group consisting of Seoul virus, Dobrava virus, and Hantaan virus.

16. (Twice amended) A method for inducing a protective immune response to a Seoul hantavirus protein in a mammal comprising

(i) preparing a nucleic acid encoding a Seoul hantavirus M gene segment protein comprising the sequence set forth in SEQ ID NO:1 and the sequence set forth in SEQ ID NO:2, operatively linked to a promoter active in cells of a mammal, wherein said M gene segment protein includes at least one antigenic determinant;

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(ii) coating the nucleic acid in (i) onto inert particles suitable for carrying a polynucleotide stably coated thereon;

(iii) accelerating the particles of (ii) into epidermal cells of the mammal in vivo, to generate an immune response sufficient for protection against a Seoul hantavirus challenge in said mammal.

17. (Twice amended) A method for inducing a protective immune response to a hantavirus infection in a mammal comprising

(i) preparing a nucleic acid encoding an M gene segment protein comprising the sequence set forth in SEQ ID NO:1, which sequence includes at least one antigenic determinant of a first hantavirus protein operatively linked to a promoter operative in cells of a mammal;

(ii) coating the nucleic acid in (i) onto inert particles suitable for carrying a polynucleotide stably coated thereon;

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(iii) accelerating the particles of (ii) into epidermal cells of the mammal in vivo to generate an immune response sufficient for protection in said mammal to a hantaviral challenge comprising a viral isolate distinct from one carrying the sequence set forth in SEQ ID NO:1.

26. (Twice amended) A vaccine for protection against infection by more than one hantavirus comprising a composition of matter comprising a carrier particle having one or more nucleic acids coated thereon, which nucleic acids comprise DNA sequences that include a promoter operative in the cells of a mammal and a protein coding region coding for an M gene segment protein comprising the sequence set forth in SEQ ID NO:1, which sequence includes at least one antigenic determinant of a hantavirus protein said hantavirus selected from the group consisting of SEOV virus, Dobrava virus, and Hantaan virus.

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27. (Twice amended) The vaccine of claim 26, wherein the composition comprises a first carrier particle having one or more nucleic acids coated onto the carrier particle, wherein said nucleic acids comprise one or more DNA sequences that each comprise a promoter operative in the cells of a mammal and a protein coding region coding for an M gene segment protein comprising the sequence set forth in SEQ ID NO:1, which sequence includes at least one antigenic determinant of a hantavirus, wherein said hantavirus is selected from the group consisting of Seoul virus, Dobrava virus, and Hantaan virus, and a second carrier particle having one or more nucleic acids coated onto the carrier particle, wherein said nucleic acids comprise one or more DNA sequences that each comprise a promoter operative in the cells of a mammal and a protein coding region coding for an M gene segment protein comprising the sequence set forth in SEQ ID NO:1, which sequence includes at least one antigenic determinant of a hantavirus, wherein said hantavirus is selected from the group consisting of Seoul virus, Dobrava virus, and Hantaan virus, wherein the hantavirus corresponding to the antigenic determinant of the nucleic acid of the first carrier particle is different than the hantavirus corresponding to the antigenic determinant of the nucleic acid of the second carrier particle.